Mathematics

Year Group 10 Foundation

Half Term 1

|  |  |
| --- | --- |
| Number of Hours | Topic |
| 4 | Integers and place value Page 1 - , 18 |
| 3 | Decimals Page 7 |
| 5 | Indices, powers and rootsPage 26 |
| 4 | Factors, multiples and primesPage 34 |
| 6 | Algebra: the basicsPage 89 |
| 5 | Expressions and substitution into formulaePage 116 |
| 11 | Tables, charts and graphsPage 319 |
| Reasons behind order of topic in this half term |
| Follows Edexcel two year scheme of learning and mirrors topics assessed in key assessments.* The course starts with basic number work and the topics of integers, decimals and indices provides a gentle introduction to the course. Many of the topics have been covered during KS3 and staff can choose to move quickly through.
* Factors multiples and primes regularly involve HCF and LCM & Venn diagrams and link in with indices, powers and roots.
* Algebra starts with the basics and much of the algebtra content been covered at KS3.
 |

Mathematics

Year Group 10 Foundation

Half Term 2

|  |  |
| --- | --- |
| Number of Hours | Topic |
| 3 | Pie chartsPage 336 |
| 4 | Scatter graphsPage 338 |
| 7 | Statistics, sampling and the averagesPage 310  |
| 7 | Fractions, decimals and percentagesPage 42 / 7 / 73 |
| 6 | PercentagesPage 73 |
| Reasons behind order of topic in this half term |
| Follows Edexcel two year scheme of learning and mirrors topics assessed in key assessments.Statistics, sampling and averages follow naturally on from pie charts, scatter graphs and tables / charts.The main body of percentages work contains topics students have covered for the first time and naturally links into fractions, decimals and percentages.  |

Mathematics

Year Group 10 Foundation

Half Term 3

|  |  |
| --- | --- |
| Number of Hours | Topic |
| 9 | Equations and inequalitiesPage 98 |
| 5 | Sequences Page 127 |
| 7 | Properties of shapes, parallel lines and angle factsPage 168 |
| 4 | Interior and exterior angles of polygonsPage 180 |
| Reasons behind order of topic in this half term |
| Follows Edexcel two year scheme of learning and mirrors topics assessed in key assessments.Inequalities, equations and sequences contain processes crutial to GCSE mathematics and are taught together.Most of the angles work is covererd here and the more difficult topic of polygons is helped by prior knowledge of angle facts. |

Mathematics

Year Group 10 Foundation

Half Term 4

|  |  |
| --- | --- |
| Number of Hours | Topic |
| 10 | Perimeter, area and volumePage 244 / 270 |
| 8 | Real-life graphsPage 155 |
| 6 | Straight-line graphsPage 136 |
|  |  |
|  |  |
|  |  |
| Reasons behind order of topic in this half term |
| Follows Edexcel two year scheme of learning and mirrors topics assessed in key assessments.Perimeter, area and volume naturally follow work with shapes and angles.Real life graphs link with straight line graphs and students must understand y = mx+c and how to find the gradient and y-intercept. |

Mathematics

Year Group 10 Foundation

Half Term 5

|  |  |
| --- | --- |
| Number of Hours | Topic |
| 11 | Transformations Page 283 |
| 4 | Ratio Page 63 |
| 5 | ProportionPage 161 |
|  |  |
|  |  |
|  |  |
| Reasons behind order of topic in this half term |
| Follows Edexcel two year scheme of learning and mirrors topics assessed in key assessments.Transformations has been covered at KS3 and students appreciate GCSE type questions involving reflections, translations, rotations and enlargements.Ratio and proportion features heavily on the GCSE and students must be prepared for the Y10 mock paper. |

Mathematics

Year Group 10 Foundation

Half Term 6

|  |  |
| --- | --- |
| Number of Hours | Topic |
| 5 | Right-angled triangles: Pythagoras and trigonometryPage 217 |
| 12 | ProbabilityPage 342 |
| 7 | Multiplicative reasoningPage 189/ 201 |
| 5 | Plans and elevationsPage 264 |
| Reasons behind order of topic in this half term |
| Follows Edexcel two year scheme of learning and mirrors topics assessed in key assessments.Although Y10 students spend a week at work experience in this term it is hoped they can finish the year with some of the cross-over topics such as Trigonometry and probability trees. Multipcliative reasoning & plans and elevations finish the year and can by taught through past paper questions quite quickly. |

|  |
| --- |
| Reasons behind order of topics in this Year |
|  |